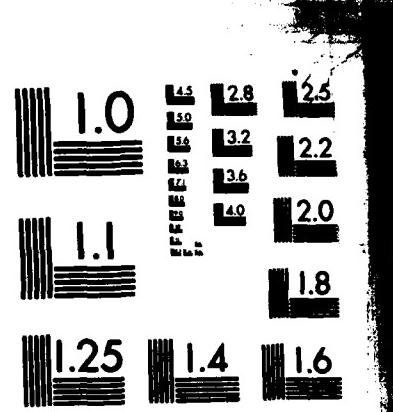


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MAY 1979

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May 1979

LIFE CYCLE NAVY OFFICER BILLET COSTS--FY79:  
AN INTERIM REPORT

Ernest A. Koehler

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## FOREWORD

This effort was conducted in support of Navy Decision Coordinating Paper, Manpower Requirements Development System (NDCP-20109-PN) under sub-project 20109-PN.03, Manpower Cost in System Design, and the sponsorship of the Deputy Chief of Naval Operations (OP-01). The objective of the subproject is to apply human engineering technology in developing procedures to incorporate hardware/software/personnel tradeoffs and cost benefit alternatives in all stages of system design.

The objective of this effort was to provide decision makers in manpower planning and in hardware development offices with specific officer billet cost information. This cost information can be used for developing life cycle costs for existing and potential new hardware systems of the Navy, for developing cost estimates of various manning concepts, and for conducting manpower-hardware cost trade-off analyses. The cost data contained in this report were prepared under contract by B-K Dynamics Inc., of Rockville, Maryland.

This is the fifth in a series of reports published under subproject 20109-PN.03. The first three (NPRDC Special Reports 77-16, 78-14, and 79-13) provided life cycle Navy enlisted billet costs for FYs 77, 78, and 79 respectively. The fourth (NPRDC Special Report 79-11) provided Navy enlisted projections for FY78 through FY84.

The efforts of LCDR Lee S. Mairs, Head, Cost and Economic Analysis Section, Chief of Naval Operations (OP-135M) are gratefully acknowledged for his service as the on-site technical monitor of the contract and for his assistance and guidance as the principal technical advisor for the study.

DONALD F. PARKER  
Commanding Officer

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## CONTENTS

	Page
<b>INTRODUCTION . . . . .</b>	<b>1</b>
<b>Problem . . . . .</b>	<b>1</b>
<b>Background . . . . .</b>	<b>1</b>
<b>Objective . . . . .</b>	<b>1</b>
<b>APPROACH . . . . .</b>	<b>3</b>
<b>Officer Billet Cost Model . . . . .</b>	<b>3</b>
<b>Officer Communities . . . . .</b>	<b>5</b>
<b>RESULTS . . . . .</b>	<b>7</b>
<b>Cost Computation . . . . .</b>	<b>7</b>
<b>Discount Rate . . . . .</b>	<b>7</b>
<b>REFERENCES . . . . .</b>	<b>9</b>
<b>APPENDIX—LIFE CYCLE NAVY OFFICER BILLET COSTS . . . . .</b>	<b>A-0</b>
<b>DISTRIBUTION LIST</b>	

## INTRODUCTION

### Problem

Personnel costs currently constitute about 61 percent of the total DoD yearly budget and are rising yearly per Congressional Budget Office estimates.<sup>1</sup> As manpower costs have increased, the Navy's concern for its ability to make wise manpower cost decisions has increased commensurately. Unlike hardware, initial manpower costs are trivial compared to those of the long term, which includes future pay, benefits, and support costs of billet incumbents and their successors.

If Navy manpower planners and hardware program managers are to make informed decisions on cost-effective design alternatives, they must have information on the life cycle costs of officer and enlisted personnel required by such design alternatives.

### Background

The life cycle Navy enlisted billet costs based on FY79 data were provided by DPRDC Special Report 79-13 (Koehler, 1979). These costs were computed from costing information available in the Enlisted Billet Cost Model (EBCM), which is being maintained by the Chief of Naval Operations (OP-135). The structure and format of the data base for the EBCM were developed by the SECNAV Task Force on Personnel Retention in 1966. Over the years, adjustments have been made in their data base to cope with changing data sources, formats, and availability and to take advantage of new information as it has become available.

### Objective

The objective of this research and development effort was to provide Navy manpower planners and hardware program managers with the latest available data on the life cycle costs of Navy officers by designators and pay rates for 1, 5, 10, 15, and 20-year periods.

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<sup>1</sup>Congressional Budget Office Background Paper #6 FY 1977, Page 37,  
2 April 1976.

## APPROACH

### Officer Billet Cost Model

An Officer Billet Cost Model (OBCM) was developed for use in determining life cycle billet officer costs, using the methodology of the Enlisted Billet Cost Model (EBCM) maintained at CNO. This was done to ensure compatibility between the two models in treating basic input data and subsequent cost outputs.

The EBCM was developed to provide the Navy with a means for computing enlisted manpower resource costs based on a standard, uniform cost formula. The model recognizes that, fundamentally, the Navy recruits (procures) basic personnel resources, and develops, through training and experience within these resources, the skills and skill levels required to perform the work of the Navy so it can accomplish its total mission. In the officer area, these skills and skill levels are represented by designators and grades; that is, officer manpower requirements are spelled out in terms of designator and grade for the many jobs required within the Navy's numerous units and activities. Within these requirement frameworks, the OBCM computes the costs of manning the authorized billets with people having requisite skills, in terms of the investment and operation cost to the U.S. Government, for each year in the life cycle of a given billet. A detailed list of cost items being used in the model is provided in Table 1. Although this list covers most government costs, those connected with GI benefits are not included.

In meeting the requirements for life cycle manpower costing, the manpower picture is viewed dynamically; that is, people are seen as flowing up through each grade and length of service. They are procured, trained, used, and, as time passes, lost through attrition, death, or retirement.

The Navy's mission is accomplished by people in operational billets. For costing purposes, officers are considered as being in an operational billet or status except when they are (1) in school or another type of training program that removes them from their assigned unit, or (2) in a transient, patient, or prisoner status. Manpower related costs incurred during operational times are considered in the model formula as "Up" costs; and those incurred during nonoperational times, as "Down" costs. Down costs include pay-related costs and an apportionment of support and certain one-time occurring costs, such as procurement (recruiting) costs, based upon the length of the Down time. The concept is that Down costs represent a manpower resource investment that the Navy must make to obtain future operational service. Therefore, all Down costs are amortized over future operational billet years.

One major cost element that must be apportioned to operational billets is that related to retirement. The development of total cost of retirement per individual, called the principal value of retirement, is based on life expectancy data. This cost, computed on the basis of the average age at the time of retirement from specific grades, is distributed by the model, back (in time) over the operational billet years. Several methods of distributing this cost have been developed and tested. The method found to be the best for billet costing

purposes, and used in this model, distributes the principal value of retirement as a fixed percentage of active base pay. This method was approved for billet costing by the Chief of Naval Operations.<sup>1</sup>

Table 1

Factors Included in the Officer Billet Cost Model (OBCM) Computations

Data Element	Action/Source
Base Pay	1 Oct 1978 OASD(MRA&L) MPP
Clothing Allowance	MNP/Pay Manual <sup>a</sup>
Command and Administration	O&MN
Commissary	O&MN
Death Gratuity	MPN
Dental Pay	MPN
Dependent School	DoD Dependent School Office
Disability	MPN
Family Separation Allowance	MPN
FICA	6.02% of first \$17,500 from SSA
Hazard Pay	MPN
Insurance/Housing (FHA)	DoD McClary Report
Medical Costs	BUMED Comptroller; O&MN, Budget Activity 8
Medical/Veterinarian Pay	MPN
Messing Subsistence	MPN/Pay Manual
Overseas Station Allowance	MPN
Prisoner Apprehension	MPN
Personnel Procurement	MPN
Quarters Allowance	Inputed value from MPN for MILCON equivalent for base housing; MPN Pay Table for off-base housing
Reenlistment/Continuance Pay	FY 1979 Congressional Submit MPN/O&MN
Retirement	Computed from force statistics and entitlements from Pay Manual
School Training	NITRAS/RMS
Sea and Foreign Duty Pay	MPN
Severance/Readjustment Pay	MPN
Travel/Transportation	MPN tied to move patterns by grade

<sup>a</sup>MPN/O&MN budgets are from Congressional Submit., January 1978; Pay Manual is DoD Military Pay, Entitlements, Allowance Manual, 1968, as amended.

<sup>1</sup>CNO ltr OP-90E11 pgs Ser 620-90 of 22 April 1969.

Basically, we are discussing a mathematical model that distributes military manpower costs (from initial procurement to the end of retirement) to the operational billet years on a year-by-year basis over a career. In essence, the cost model views each designator as a flow of people through a pipeline. The pipeline is divided into year-long intervals and all costs incurred by the designator in each interval are noted. During the interval, some officers are lost through various leaks in the pipeline (e.g., attrition, death, retirement, change in designator). No attempt is made to analyze these leaks; the only thing considered is the quantity of people entering the next interval. Quantity refers to the relative number only since the actual number would not affect the cost per officer/billet, but only the total cost. Accordingly, the flow is normalized such that one officer retires at the end of the career span. This normalization process dictates that, based upon the flow rate for a given designator (which is different for each designator), the number of officers that must be introduced into the pipeline in the first year to produce one officer retiring at the end varies significantly.

A primary factor characterizing manpower billet costs is that these data must reflect the total cost of manning an established operational military billet, or a military billet that would be established within a proposed system. The costs that are developed by the model results in an "operational billet costs per year" for all operational billets in the Navy that are defined by a designator and grade.

The range of cost data is open-ended. As each cost element is identified, it must be determined whether it applies to all designators. If it applies to a particular designator(s), then the value is added to each appropriate designator as constant dollars by year of service or by grade.

The preliminary computations to obtain the input data (in card form) are made external to the model. The model will accept any numbers up to six digits. Accordingly, the precomputations and source of data has been kept as a matter of routine so that future cost changes can be incorporated on an "as-required" or "as-occurred" basis.

Finally, it should be noted that the model is quite flexible in the sense that there is no fixed number of designator card packets that must be run at one time. This allows for experimentation with a single designator or a group of designators. A hypothetical designator can be created by defining a new designator XXX and preparing a cost/statistical profile, and run either by itself or with an established designator to obtain a comparison of results.

#### Officer Communities

Designator codes are used in the Navy to specify officers by categories for personnel accounting and administrative purposes and to identify the status of personnel. For example, the designator code for surface warfare officers is 111X.

Presently, about 95 different officer categories are specified by designator code, some of which contain very small populations. Therefore, to ensure that these small populations do not provide misleading continuance and advancement statistics, these categories were aggregated to create 22 communities. These communities, and the designator codes comprising them, are listed in Table 2.

Table 2  
Aggregated Officer Communities

Officer Community	Designator Codes Included
1 Other Line Officer	1100, 113X, 114X, 118X, 119X
2 Surface Warfare	111X, 116X
3 Submarine Warfare	112X, 117X
4 Aviation Officer (Pilot)	130X, 131X, 139X
5 Aviation Flight Officer	132X, 137X
6 Engineering Duty Officer	140X, 141X, 144X, 146X, 147X
7 Aviation Engineering Duty Officer	151X
8 Aviation Maintenance Duty Officer	152X
9 Special Duty Officer (SDO)--Crypto	161X, 162X
10 Special Duty Officer (SDO)--Intelligence/Photo	163X, 164
11 Special Duty Officer (SDO)--Public Affairs	165X, 167X, 168X, 169X
12 Special Duty Officer (SDO)--Geophysics	180X
13 Medical Corps Officer	210X, 191X
14 Dental Corps Officer	220X, 192X
15 Medical Service Corps Officer	230X, 193X
16 Judge Advocate General's Corps Officer	250X, 195X
17 Nurse Corps Officer	290X
18 Supply Corps Officer	310X
19 Chaplain Corps	410X, 194X
20 Civil Engineer Corps	510X
21 Line-Limited Duty Officer	6XXX (all)
22 Warrant Officer	7XXX, 8XXX (all)

## RESULTS

### Cost Computation

The life cycle Navy officer billet costs for each of the 22 officer communities are provided in the appendix. Costs are provided for ranks O-1 through O-6 (ensign through captain) and for warrant officers W-1 through W-4.

These costs were computed from FY79 costing information available in the Officer Billet Cost Model (OBCM). As shown in Table 1, the model's primary sources of cost data are the various budget documents that provide information for the past reporting period as well as justification for, and some detail on, money requirements for the upcoming period. After the expenditures have been identified, they are distributed to individual designators wherever possible--a critical step that results in cost differentiation among designators. Those costs that are not applicable to a given designator are applied to the pay grade if appropriate or equally across all grades in the annual cost by year computations.

It should be noted that the training cost data included in the OBCM were derived primarily from records maintained by the Chief of Naval Education and Training (CNET). Thus, certain training costs controlled by commands other than CNET were not considered in computing the billet costs shown in the appendix. Examples of such costs include those related to (1) medical school training for naval reserve officers with an active duty commitment, (2) training provided by other services or agencies (e.g., the Army, Air Force, Atomic Energy Commission, or National Aeronautics and Space Administration), (3) contractor (factory) training for new weapon/support systems, and (4) training aircraft and support services and personnel for such aircraft. These costs, and others still to be identified, will be determined and included in a future revision to this report.

### Discount Rate

The multiple-year (5, 10, 15, and 20) billet cost tables were computed using a 10 percent discount rate. According to the Office of Management and Budget Circular A-94,<sup>2</sup> when computing costs for future year obligations, such costs are to be discounted using a 10 percent discount rate.

The 1-year cost figures do not reflect a discount rate. If the reader needs to apply a different discount rate or does not want to discount costs, the 1-year costs should be used as the base for such computations. For example, if no discount rate is to be applied and billet costs for a 15-year period are desired, the 1-year cost figure should be multiplied by 15. No attempt has been made in this report to anticipate or consider inflation. All costs, current and future, are based on FY79 dollars.

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<sup>2</sup>Office of Management and Budget Circular A-94. Subj: Discount Rates to be Used in Evaluating Time, Life-Cycle Costs, and Benefits.

If a discount rate other than that reflected in the cost tables in the appendix needs to be applied, the following formula can be used with the 1-year cost figures:

$$S_n = \left[ 1 - \left( \frac{1}{1+r} \right)^n \right] \left[ \left( \frac{1+r}{r} \right) - (x) \right]$$

where:

S = Billet cost

n = Number of years in billet life

r = Discount rate

x = Billet cost for first year

Using this formula, the billet cost for a Submarine Warfare Officer (112X), rank 03, for a 5-year period, has been computed using the following values:

n = Number of years of billet life = 5

r = Discount rate = 10 percent = .10

x = Billet cost for first year = 30,224

Submarine warfare  
Officer (0-3) 5-year  
Billet Cost using  
10% discount rate.

$$\begin{aligned} &= \left[ 1 - \left( \frac{1}{1 + .10} \right)^5 \right] \left[ \left( \frac{1 + .10}{.10} \right) - (x) \right] \\ &= [1 - (.90909)^5] \times [11 \times 30,224] \\ &= (1 - .6209181) \times 11 \times 30,224 \\ &= .3790819 \times 11 \times 30,224 \\ &= \$126,031.08 \text{ or} \\ &= \$126,031.00^3 \end{aligned}$$

---

<sup>3</sup>In the appendix, this figure computes to \$126,030 because of rounding in the 1-year cost scale.

#### REFERENCES

Koehler, E. A. Life cycle Navy enlisted billet costs--FY79 (NPRDC Special Report 79-13). San Diego: Navy Personnel Research and Development Center, March 1979.

Koehler, E. A. Manpower availability--Navy enlisted projections--FY78-84 (NPRDC Special Report 79-11). San Diego: Navy Personnel Research and Development Center, January 1979.

Martin, J. I., Koehler, E. A., Mairs, L. S., & Hogan, P. F. Life cycle Navy enlisted billet costs tables--FY77 (NPRDC Special Report 77-16). San Diego: Navy Personnel Research and Development Center, September 1977.

Martin, J. I., Koehler, E. A., & Mairs, L. S. Life cycle Navy enlisted billet costs--FY78 (NPRDC Special Report 78-14). San Diego: Navy Personnel Research and Development Center, July 1978.

APPENDIX  
LIFE CYCLE NAVY OFFICER BILLET COSTS

Note. The training cost data included in the OBCM were derived primarily from records maintained by the Chief of Naval Education and Training (CNET). Thus, certain training costs controlled by commands other than CNET were not considered in computing the billet costs shown in the appendix. These costs will be determined and included in a future revision to this report.

Table A-1  
Life Cycle Navy Officer Billet Costs by Designator

Community/ Designators	Rank	Years <sup>a</sup>				
		1	5	10	15	20
Other Line Officer (1100, 113X, 114X, 118X, 119X)	001 O-1	15633.	65188.	105664.	130797.	146402.
	001 O-2	20295.	84627.	137175.	169803.	190062.
	001 O-3	23434.	97717.	158391.	196066.	219459.
	001 O-4	29750.	124054.	201081.	248910.	278608.
	001 O-5	36107.	150561.	244049.	302097.	338141.
	001 O-6	41265.	172070.	278912.	345253.	386445.
Surface Warfare (111X, 116X)	002 O-1	18131.	75604.	122548.	151697.	169796.
	002 O-2	23645.	98597.	159817.	197831.	221435.
	002 O-3	27674.	115397.	187050.	231541.	259166.
	002 O-4	32331.	134816.	218527.	270504.	302779.
	002 O-5	37103.	154715.	250781.	310430.	347468.
	002 O-6	43931.	183187.	296931.	367558.	411412.
Submarine Warfare (112X, 117X)	003 O-1	18229.	76013.	123211.	152517.	170714.
	003 O-2	23937.	99814.	161791.	200274.	224169.
	003 O-3	30224.	126030.	204285.	252876.	283047.
	003 O-4	35815.	149344.	242075.	299654.	335406.
	003 O-5	40681.	169634.	274965.	340367.	380976.
	003 O-6	44902.	187235.	303494.	375682.	420506.
Aviation Officer (Pilot) (130X, 131X, 139X) <sup>b</sup>	004 O-1	34260.	142860.	231565.	286644.	320844.
	004 O-2	75195.	313553.	508246.	629135.	704199.
	004 O-3	75347.	314187.	509273.	630407.	705622.
	004 O-4	69559.	290052.	470152.	581981.	651418.
	004 O-5	77306.	322356.	522514.	646798.	723968.
	004 O-6	57935.	241581.	391585.	484726.	542559.
Aviation Flight Officer (132X, 137X) <sup>b</sup>	005 O-1	27744.	115689.	187523.	232126.	259822.
	005 O-2	24728.	103113.	167138.	206892.	231577.
	005 O-3	29198.	121752.	197350.	244291.	273438.
	005 O-4	33759.	140771.	228178.	282452.	316152.
	005 O-5	38628.	161074.	261088.	323190.	361750.
	005 O-6	43446.	181164.	293653.	363500.	406870.

<sup>a</sup>Multiple-year (5, 10, 15, and 20) cost figures reflect a 10 percent discount rate; 1-year cost figures provide specific billet costs for each of the 22 officer communities.

<sup>b</sup>Costs of aircraft designed and operated specifically for training have not been considered in computing costs for the 1300 series designators. These costs will be determined and included in a future revision to this report.

Table A-1 (Continued)

Community/ Designators	Rank	Years <sup>a</sup>				
		1	5	10	15	20
<b>Engineering Duty Officer (140X, 141X, 144X, 146X, 147X)</b>	006 O-1	16668.	69503.	112660.	139456.	156095.
	006 O-2	23468.	97858.	158621.	196350.	219777.
	006 O-3	27271.	113717.	184326.	228169.	255392.
	006 O-4	32527.	135633.	219851.	272144.	304614.
	006 O-5	36218.	151024.	244799.	303026.	339180.
	006 O-6	41191.	171761.	278412.	344634.	385752.
<b>Aviation Engineering Duty Officer (151X)</b>	007 O-1	17389.	72510.	117533.	145489.	162847.
	007 O-2	22963.	95753.	155208.	192125.	215048.
	007 O-3	23745.	119863.	194289.	240501.	269196.
	007 O-4	31175.	129996.	210713.	260832.	291953.
	007 O-5	36485.	152138.	246604.	305260.	341631.
	007 O-6	41378.	172541.	279676.	346198.	387504.
<b>Aviation Maintenance Duty Officer (152X)</b>	008 O-1	19312.	80529.	130531.	161578.	180856.
	008 O-2	23370.	97450.	157959.	195530.	218859.
	008 O-3	28395.	118403.	191923.	237573.	265918.
	008 O-4	32712.	136405.	221102.	273692.	306347.
	008 O-5	38050.	158664.	257181.	318354.	356337.
	008 O-6	44169.	184179.	298540.	369550.	413641.
<b>SDO Crypto (161X, 162X)</b>	009 O-1	19525.	81417.	131970.	163360.	182851.
	009 O-2	23279.	97070.	157344.	194769.	218007.
	009 O-3	27200.	113420.	183846.	227575.	254727.
	009 O-4	32001.	133440.	216296.	267743.	299688.
	009 O-5	36636.	152767.	247624.	306523.	343095.
	009 O-6	41106.	171407.	277837.	343922.	384956.
<b>SDO Intelligence/ Photo (163X, 164X)</b>	010 O-1	15470.	64508.	104562.	129433.	144876.
	010 O-2	21515.	89715.	145421.	180010.	201487.
	010 O-3	25793.	107553.	174336.	215803.	241551.
	010 O-4	30997.	129253.	209510.	259343.	290286.
	010 O-5	35999.	150111.	243319.	301194.	337129.
	010 O-6	41131.	171511.	278006.	344132.	385190.

<sup>a</sup>Multiple-year (5, 10, 15, and 20) cost figures reflect a 10 percent discount rate; 1-year cost figures provide specific billet costs for each of the 22 officer communities.

Table A-1 (Continued)

Community/ Designators	Rank	Years <sup>a</sup>				
		1	5	10	15	20
<b>SDO Public Affairs (165X, 167X, 168X, 169X)</b>	011 O-1	24701.	103000.	166955.	206666.	231324.
	011 O-2	22312.	93038.	150808.	186678.	208951.
	011 O-3	26498.	110493.	179101.	221701.	248153.
	011 O-4	31033.	129404.	209753.	259644.	290623.
	011 O-5	37210.	155161.	251504.	311326.	348470.
	011 O-6	41284.	172149.	279040.	345412.	386623.
<b>SDO Geophysics (180X)</b>	012 O-1	14927.	62244.	100892.	124890.	139791.
	012 O-2	19749.	82351.	133484.	165234.	184949.
	012 O-3	23549.	98196.	159169.	197028.	220536.
	012 O-4	26763.	111598.	180892.	223919.	250635.
	012 O-5	35528.	148147.	240135.	297253.	332718.
	012 O-6	41357.	172453.	279534.	346022.	387307.
<b>Medical Corps Officer (210X, 191X)</b>	013 O-1	14004.	58395.	94654.	117168.	131147.
	013 O-2	16015.	66780.	108246.	133993.	149980.
	013 O-3	28412.	118474.	192038.	237715.	266077.
	013 O-4	30902.	128857.	208868.	258548.	289396.
	013 O-5	36287.	151312.	245265.	303603.	339826.
	013 O-6	45401.	189316.	306867.	379857.	425179.
<b>Dental Corps Officer (220X, 192X)</b>	014 O-1	14023.	58474.	94782.	117327.	131325.
	014 O-2	16034.	66860.	108374.	134152.	150158.
	014 O-3	26476.	110401.	178952.	221517.	247947.
	014 O-4	31522.	131443.	213058.	263736.	295202.
	014 O-5	40007.	166824.	270409.	334727.	374664.
	014 O-6	47935.	199883.	323995.	401059.	448910.
<b>Medical Service Corps Officer (230X, 193X)</b>	015 O-1	20396.	85049.	137857.	170648.	191008.
	015 O-2	24241.	101082.	163846.	202818.	227016.
	015 O-3	28282.	117932.	191159.	236628.	264860.
	015 O-4	32954.	137414.	222737.	275717.	308613.
	015 O-5	37180.	155036.	251301.	311075.	348139.
	015 O-6	42394.	176777.	286543.	354699.	397018.

<sup>a</sup>Multiple-year (5, 10, 15, and 20) cost figures reflect a 10 percent discount rate; 1-year cost figures provide specific billet costs for each of the 22 officer communities.

Table A-1 (Continued)

Community/ Designators	Rank	Years <sup>a</sup>				
		1	5	10	15	20
<b>Judge Advocate General's Corps Officer (250X, 195X)</b>	O16 O-1	15695.	65446.	106083.	131316.	146983.
	O16 O-2	17705.	73828.	119669.	148133.	165807.
	O16 O-3	25252.	105293.	170679.	211276.	236484.
	O16 O-4	28240.	117757.	190375.	236276.	264467.
	O16 O-5	34432.	143577.	232727.	288083.	322454.
	O16 O-6	41274.	172107.	278973.	345328.	386530.
<b>Nurse Corps Officer (290X)</b>	O17 O-1	15127.	63078.	102244.	126563.	141664.
	O17 O-2	18069.	75345.	122129.	151178.	169216.
	O17 O-3	25795.	107562.	174349.	215820.	241569.
	O17 O-4	29942.	124854.	202379.	250516.	280406.
	O17 O-5	35869.	149569.	242440.	300106.	335912.
	O17 O-6	41299.	172211.	279142.	345537.	386764.
<b>Supply Corps Officer (310X)</b>	O18 O-1	17224.	71822.	116418.	144108.	161302.
	O18 O-2	24370.	101620.	164718.	203897.	228224.
	O18 O-3	27782.	115847.	187780.	232444.	260177.
	O18 O-4	32312.	134737.	218398.	270345.	302601.
	O18 O-5	36962.	154127.	249828.	309251.	346148.
	O18 O-6	41317.	172286.	279263.	345688.	386932.
<b>Chaplain Corps (410X, 194X)</b>	O19 O-1	16238.	67710.	109753.	135859.	152068.
	O19 O-2	22222.	92663.	150199.	185925.	208108.
	O19 O-3	26043.	108596.	176026.	217894.	243892.
	O19 O-4	30244.	126114.	204420.	253043.	283234.
	O19 O-5	35800.	149281.	241974.	299529.	335266.
	O19 O-6	41025.	171069.	277290.	343245.	384198.
<b>Civil Engineer Corps (510X)</b>	O20 O-1	15977.	66622.	107989.	133675.	149624.
	O20 O-2	21776.	90803.	147135.	182194.	203931.
	O20 O-3	25940.	108166.	175329.	217033.	242927.
	O20 O-4	31335.	130663.	211795.	262171.	293451.
	O20 O-5	35995.	150094.	243292.	301160.	337092.
	O20 O-6	41134.	171523.	278026.	344157.	385218.

<sup>a</sup>Multiple-year (5, 10, 15, and 20) cost figures reflect a 10 percent discount rate; 1-year cost figures provide specific billet costs for each of the 22 officer communities.

Table A-1 (Continued)

Community/ Designators	Rank	Years <sup>a</sup>				
		1	5	10	15	20
Line-Limited Duty Officer (6XXX (ALL))	021 O-1	29427.	122707.	198898.	246207.	275583.
	021 O-2	30732.	128148.	207719.	257126.	287804.
	021 O-3	32596.	135921.	220318.	272722.	305260.
	021 O-4	32369.	137059.	222163.	275006.	307817.
	021 O-5	37383.	155882.	252673.	312773.	350090.
	021 O-6	0.	0.	0.	0.	0.
Warrant Officer (7XXX, 8XXX (ALL))	022 W-1	24145.	100681.	163197.	202014.	226117.
	022 W-2	30716.	128082.	207611.	256992.	287654.
	022 W-3	34619.	144357.	233991.	289647.	324206.
	022 W-4	32147.	134049.	217283.	268965.	301056.

<sup>a</sup>Multiple-year (5, 10, 15, and 20) cost figures reflect a 10 percent discount rate; 1-year cost figures provide specific billet costs for each of the 22 officer communities.

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